

~~At page 7, line 11, after "Nucleotide", please insert --(SEQ ID NO: 7)--.~~

~~At page 7, line 11, after "amino acid", please insert --(SEQ ID NO: 8)--.~~

~~At page 7, line 12, after "sequences", please insert --(SEQ ID NOs: 9-12, respectively)--.~~

IN THE CLAIMS

Please amend claims 1, 3, 4, 24, 26, 27 and 36 as follows:

Sub D1 a1 1. (AMENDED) An isolated STEAP-2 protein having an amino acid sequence shown in FIG. 9 (SEQ ID NO: 6).

2. (UNCHANGED) An isolated polypeptide of at least 8 contiguous amino acids of the protein of claim 1.

3. (AMENDED) An isolated polypeptide comprising an amino acid sequence which is at least 90% identical to the amino acid sequence shown in FIG. 9 (SEQ ID NO: 6) over its entire length.

a2 4. (AMENDED) An isolated polynucleotide selected from the group consisting of (a) a polynucleotide having the sequence as shown in FIG. 9 (SEQ ID NO: 6), wherein T can also be U; (b) a polynucleotide encoding a STEAP-2 polypeptide whose sequence is encoded by the cDNA contained in plasmid 98P4B6-GTD3 as deposited with American Type Culture Collection as Accession No. PTA-311; and (c) a polynucleotide encoding the STEAP-2 protein of claim 1.

5. (UNCHANGED) An isolated polynucleotide which selectively hybridizes under stringent conditions to a polynucleotide according to claim 4 or its complement.

6. (UNCHANGED) An isolated fragment of a polynucleotide according to claim 4 which is at least 20 nucleotide bases in length.

7. (UNCHANGED) An isolated polynucleotide which is fully complementary to a polynucleotide according to claim 4.
8. (UNCHANGED) An isolated fragment of a polynucleotide according to claim 7 which is at least 20 nucleotide bases in length.
9. (UNCHANGED) A recombinant expression vector which contains a polynucleotide according to claim 4.
10. (UNCHANGED) A host cell which contains an expression vector according to claim 9.
11. (UNCHANGED) An isolated polynucleotide according to claim 5 which is labeled with a detectable marker.
12. (UNCHANGED) A process for producing a STEAP-2 protein comprising culturing a host cell of claim 10 under conditions sufficient for the production of the polypeptide and recovering the STEAP-2 protein from the culture.
13. (UNCHANGED) An antibody which specifically binds to the STEAP-2 protein of claim 1.
14. (UNCHANGED) A monoclonal antibody according to claim 13.
15. (UNCHANGED) The monoclonal antibody of claim 14 which is labeled with a detectable marker.
16. (UNCHANGED) The monoclonal antibody of claim 14 which is conjugated to a toxin.

17. (UNCHANGED) The monoclonal antibody of claim 14 which is conjugated to a therapeutic agent.

18. (UNCHANGED) An assay for detecting the presence of a STEAP-2 protein in a biological sample comprising contacting the sample with an antibody of claim 15, and detecting the binding of STEAP-2 protein in the sample thereto.

19. (UNCHANGED) An assay for detecting the presence of a STEAP-2 polynucleotide in a biological sample, comprising

(a) contacting the sample with a polynucleotide probe which specifically hybridizes to a polynucleotide of claim 4 or its complement; and

(b) detecting the presence of a hybridization complex formed by the hybridization of the probe with STEAP-2 polynucleotide in the sample, wherein the presence of the hybridization complex indicates the presence of STEAP-2 polynucleotide within the sample.

20. (AMENDED) An assay for detecting the presence of STEAP-2 mRNA in a biological sample comprising:

(a) producing cDNA from the sample by reverse transcription using at least one primer;

(b) amplifying the cDNA so produced using STEAP-2 polynucleotides as sense and antisense primers to amplify STEAP-2 cDNAs therein;

(c) detecting the presence of the amplified STEAP-2 cDNA,

wherein the STEAP-2 polynucleotides used as the sense and antisense primers are capable of amplifying the polynucleotide shown in FIG. 9 (SEQ ID NO: 5).

21. (UNCHANGED) A composition for the treatment of prostate cancer comprising an antibody according to claim 14, 16 or 17, wherein the antibody binds to an extracellular domain of STEAP-2.

22. (UNCHANGED) A vaccine composition for the treatment of a cancer expressing a STEAP-2 protein comprising a STEAP-2 protein according to claim 1 and a physiologically acceptable carrier.

23. (UNCHANGED) A vaccine composition for the treatment of a cancer expressing a STEAP-2 protein comprising an immunogenic portion of a STEAP-2 protein according to claim 2 and a physiologically acceptable carrier.

a⁴ 24. (AMENDED) An isolated STEAP-3 protein having an amino acid sequence shown in FIG. 10A (SEQ ID NO: 8).

25. (UNCHANGED) An isolated polypeptide of at least 8 contiguous amino acids of the protein of claim 24.

a⁵ 26. (AMENDED) An isolated polypeptide comprising an amino acid sequence which is at least 90% identical to the amino acid sequence shown in FIG. 10A (SEQ ID NO: 8) over its entire length.

27. (AMENDED) An isolated polynucleotide selected from the group consisting of (a) a polynucleotide having the sequence as shown in FIG. 10A (SEQ ID NO: 7), wherein T can also be U; and (b) a polynucleotide encoding the STEAP-3 protein of claim 1.

28. (UNCHANGED) An isolated polynucleotide which selectively hybridizes under stringent conditions to a polynucleotide according to claim 27 or its complement.

29. (UNCHANGED) An antibody which specifically binds to the STEAP-3 protein of claim 24.

30. (UNCHANGED) A monoclonal antibody according to claim 24.
31. (UNCHANGED) The monoclonal antibody of claim 30 which is labeled with a detectable marker.
32. (UNCHANGED) The monoclonal antibody of claim 30 which is conjugated to a toxin.
33. (UNCHANGED) The monoclonal antibody of claim 30 which is conjugated to a therapeutic agent.
34. (UNCHANGED) An assay for detecting the presence of a STEAP-3 protein in a biological sample comprising contacting the sample with an antibody of claim 31, and detecting the binding of STEAP-3 protein in the sample thereto.
35. (UNCHANGED) An assay for detecting the presence of a STEAP-3 polynucleotide in a biological sample, comprising
- (a) contacting the sample with a polynucleotide probe which specifically hybridizes to a polynucleotide of claim 27 or its complement; and
 - (b) detecting the presence of a hybridization complex formed by the hybridization of the probe with STEAP-3 polynucleotide in the sample, wherein the presence of the hybridization complex indicates the presence of STEAP-3 polynucleotide within the sample.
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36. (AMENDED) An assay for detecting the presence of STEAP-3 mRNA in a biological sample comprising:
- (a) producing cDNA from the sample by reverse transcription using at least one primer;
- ab

(b) amplifying the cDNA so produced using STEAP-3 polynucleotides as sense and antisense primers to amplify STEAP-3 cDNAs therein;

ab
cont
(c) detecting the presence of the amplified STEAP-3 cDNA,

wherein the STEAP-3 polynucleotides used as the sense and antisense primers are capable of amplifying the polynucleotide shown in FIG. 10A (SEQ ID NO: 7).

37. (UNCHANGED) A composition for the treatment of prostate cancer comprising an antibody according to claim 30, 32 or 33, wherein the antibody binds to an extracellular domain of STEAP-3.

38. (UNCHANGED) A vaccine composition for the treatment of a cancer expressing a STEAP-3 protein comprising a STEAP-3 protein according to claim 24 and a physiologically acceptable carrier.

39. (UNCHANGED) A vaccine composition for the treatment of a cancer expressing a STEAP-3 protein comprising an immunogenic portion of a STEAP-3 protein according to claim 25 and a physiologically acceptable carrier.

40. (UNCHANGED) A method of inhibiting the growth of tumor cells expressing a STEAP-2 protein, comprising administering to a patient an antibody which binds specifically to the extracellular domain of STEAP-2 in an amount effective to inhibit growth of the tumor cells.

41. (UNCHANGED) The method of claim 40, wherein said antibody is conjugated to a cytotoxic agent.

42. (UNCHANGED) A method of treating a patient susceptible to or having a cancer which expresses STEAP-2, comprising administering to said patient an effective amount of an antibody which binds specifically to the extracellular domain of STEAP-2.